Claims:

1. A dual sealing system in a composite riser having a metal liner assembly wherein said dual seals prevent leakage of internal fluid to the outside of the composite riser.

2. The dual sealing system of claim 1 further comprising:

a mechanical seal in the liner assembly between a transition ring and a metal to composite interface (MCI); and

an elastomeric seal between the MCI and an elastomeric shear ply provided on the outside of the liner assembly of the composite riser.

3. The dual sealing system of claim 2 wherein said elastomeric seal prevents leakage of internal fluids to the outside of the composite riser in the event that the integrity of said mechanical seal or the integrity of the metal liner is compromised.

4. The dual sealing system of claim 2 wherein said elastomeric seal comprises an elastomeric tip provided proximate an interface between the MCI and the transition ring.

5. The dual sealing system of claim 4 wherein said elastomeric tip and the elastomeric shear ply are bonded together to form said elastomeric seal.

6. The dual sealing system of claim 4 wherein said elastomeric tip and the elastomeric shear ply are provided in an uncured state and are cured to form said elastomeric seal.

7. The dual sealing system of claim 4 wherein said elastomeric seal prevents leakage of internal fluids to the outside of the composite riser in the event that the integrity of said mechanical seal or the integrity of the metal liner is compromised.

8. A method of preventing leakage of internal fluid to the outside of a composite riser having a metal liner assembly, comprising the steps of:

providing a dual sealing system; and

allowing fluid to flow through the composite riser, wherein said fluid is prevented from leaking to the outside of the composite riser by said dual seals.

9. The method of claim 8 wherein one of said dual seals comprises an elastomeric seal between a metal to composite interface (MCI) of the liner assembly and an elastomeric shear ply provided on the outside of the liner assembly of the composite riser.

10. The method of claim 9 wherein the other of said dual seals comprises a mechanical seal in the liner assembly between the MCI and a transition ring of the liner assembly.

11. The method of claim 10 wherein said elastomeric seal prevents leakage of said fluid to the outside of the composite riser in the event that the integrity of said mechanical seal or the integrity of the liner is compromised.

12. The method of claim 9 wherein said elastomeric seal comprises an elastomeric tip provided proximate an interface between the MCI and the transition ring.

13. The method of claim 12 wherein, in the event of leakage of said fluid, said leaked fluid forces said elastomeric tip against the MCI along said interface with the transition ring to prevent said fluid from leaking to the outside of the composite riser.

14. The method of claim 12 wherein the other of said dual seals comprises a mechanical seal in the liner assembly between the MCI and a transition ring of the liner assembly.

15. The method of claim 14 wherein, in the event of leakage of said fluid around said mechanical seal, said leaked fluid forces said elastomeric tip against the MCI along said interface with the transition ring to prevent said fluid from leaking to the outside of the composite riser.

16. The method of claim 14 wherein, in the event of leakage of said fluid from the liner, said leaked fluid forces said elastomeric tip against the MCI along said interface with the transition ring to prevent said fluid from leaking to the outside of the composite riser.

17. A metal to composite interface (MCI) of a composite riser having a liner assembly for use with hydrocarbon production, comprising an elastomeric tip provided along an end of the MCI for forming an elastomeric seal with an elastomeric shear ply provided on the outside of the liner assembly to prevent leakage of internal fluid to the outside of the composite riser.

18. The MCI of claim 17 wherein said elastomeric tip and the elastomeric shear ply are provided in an uncured state and are cured to form said elastomeric seal.

19. The MCI of claim 17, wherein said elastomeric tip is provided proximate an interface between the MCI and a transition ring of the liner assembly.

20. The MCI of claim 19 wherein said elastomeric tip and the elastomeric shear ply are provided in an uncured state and are cured to form said elastomeric seal.

21. The MCI of claim 17 further comprising a mechanical seal surface on the inner surface of the MCI proximate said elastomeric tip for forming a mechanical seal with a transition ring of the liner assembly to prevent leakage of internal fluid to the outside of the composite riser.

22. The MCI of claim 21, wherein said mechanical seal surface comprises inner grooves which conform to outer grooves of the transition ring to form said mechanical seal.